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DROP PLUMB LINE
CHECK ALIGNMENT
IN ALL PLANES

First Stage Clamp and drill
spar laminations. Clip together
the complete internal structure
(comprising spars, ribs, hinges,
brackets, packing pieces and
doublers), using master holes.
Support structure on wooden
battens and drill the centre
holes through ribs and spars.
Rivet skeleton structure

Second Stage Clip centre
skin in place using master holes
A. Use drill bar (located by
holes B) to drill the rivet holes.
Clip the leading-edge "D " skin
using master holes "C". Use
drill bar located by master holes
" D " along front spar line

ALIGN TAILPLANE TO WING-SPAR
PICK-UP
DRILL LAST FRAME

"Flight" artist's impressions of the principal stages of fuselage assembly (top) beginning with the centre section and then the attach-
ment in sections of the tailcone. Immediately above, the tailplane assembly sequence explained. This is typical of all the flying surface structures, including the wings. Sequence details are outlined above left

Nymph engineering
Simplified building procedures using only ordinary hand tools and trestles without any need for special jigs or tools were a basic assumption in designing the airframe. Instruc-tions for assembly of the whole airframe from the kit of parts are on 16 sets of illustrated instruction sheets. These have been carefully thought out to give clear step-by-step instruc-tions for the assembly of each component. Further assembly aids available to GDP customers include photograph albums and a film—backed, of course, by mandatory attendance at the Assembly School.
The kit consists of all metal cut to size and shaped where necessary (door surrounds, frames, ribs, fluted skins and rounded leading edges are the principal shaped metal parts). Rivets are the standard method of fixing, and drilling for these is made utterly simple by having a standard pitch which allows the use of jig-bored drilling strips, located by pre-drilled master holes, that should prove accurate enough to eliminate all drilling fixtures and back drilling. The basic air-craft has no expensive accessories so that the constructor may be able to offer the lowest possible price; provision is made for a wide range of optional equipment. Every single item of standard equipment will be supplied in the kit.

BTitten-Norman recognise that meticulous inspection and quality control are essential to the success of the scheme, which ultimately depends upon public confid'ence in the integrity and workmanship of the assemblers. Inspection and quality con-

trol have been made as simple as possible by the nature of the design. But it is stressed that before assembly is begun the licensee must arrange and agree the inspection procedure with the relative airworthiness authority. The licensee will need to maintain a properly controlled stores with records of all materials receipts and issues; the manufacturers will pro-vide a simple Cardex system for stock control with every shipment, together with a guarantee. When equipment is pur-chased from other sources, the licensee will need to make other arrangements for certification. Tf mistakes are made dur-ing assembly which can be cured by a repair scheme, then Britten-Norman are prepared to make recommendations at no change, and will, unless there are exceptional circumstances, provide replacement parts on open account—thus causing minimum delay and discouraging unauthorised repairs.

Construction
Assembly of all flying surfaces follows a similar sequence
in each case: only the scale and the amount of detail mark the difference. The spars are built up first from webs and angle-reinforcings—the latter are applied in varying quan-tities according to local strength requirements. Spar depths are controlled by the master holes in the case of the wing, and by the preformed U-secfion for the empennage and con-trolsurfaces. All ribs are preformed with master holes drilled: additional reinforcements, equipment attachment brackets and other landings are simply riveted-on where necessary. The